UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,892	04/13/2000	Thomas I. Insley	52942USA6A	7476

32692 7590 09/11/2003

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER
MARKHAM, WESLEY D

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/548,892	INSLEY ET AL.	
	Examiner	Art Unit	
	Wesley D Markham	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the corresp ndence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-52* is/are pending in the application.

4a) Of the above claim(s) *23 and 24* is/are withdrawn from consideration.

5)☒ Claim(s) *25-31 and 34-50* is/are allowed.

6)☒ Claim(s) *1,3,4,7,9-17,22,32,33 and 52* is/are rejected.

7)☒ Claim(s) *5,6,8,18-21 and 51* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. Acknowledgement is made of applicant's amendment F, filed as paper #25 on 6/20/2003, in which Claims 1, 32, 33, 39 – 41, and 51 were amended, and Claim 52 was added. Claims 1 and 3 – 52 are currently pending in U.S. Application Serial No. 09/548,892, with Claims 23 and 24 standing withdrawn from further consideration by the examiner as being drawn to a non-elected invention, and an Office Action on the merits follows.

Claim Objections

2. The objection to Claims 39 and 51, set forth in paragraph 4 of the previous Office Action (i.e., the non-final Office Action, paper #23, mailed on 3/20/2003), is withdrawn in light of applicant's amendment F in which the dependency of Claims 39 and 51 was changed.
3. Claim 12 is objected to because of the following informalities: Claim 12 (as presented by the applicant in the **LISTING OF THE CLAIMS** section of amendment F) appears to contain a typographical error. Specifically, the word "from" in line 1 of the claim appears to be misspelled "form". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. The rejection of Claims 40 and 41 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, set forth in paragraphs 7 – 8 of the previous Office Action, is withdrawn in light of applicant's amendment F in which the dependency of Claims 40 and 41 was changed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 3, 4, 7, 9, 12, 14 – 17, 22, 32, 33, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Popov et al. (Russian Document Number 423483) in view of Angadjivand et al. (USPN 5,496,507), and in further view of Beach et al. (USPN 4,291,244).

9. Regarding independent **Claim 1**, Popov et al. teaches a method of making a charged filter material, the method comprising condensing vapor from an atmosphere of a controlled environment onto a dielectric article (e.g., polypropylene or polyamide filaments) to form a condensate thereon, and then drying (i.e., removing condensate from) the article (See especially Example 1). Please see applicant's specification at page 5, line 28 through page 6, line 15, which notes that the applicant considers polypropylene (as taught by Popov et al.) to be a "dielectric article" as required by the claims. In addition, as the applicant has defined an "electret" to be a dielectric material that exhibits at least a quasi-permanent electric charge (see page 3, lines 1 – 2 of applicant's specification), the charged filter material (which is a dielectric material) of Popov et al. is an electret. Popov et al. does not explicitly teach that the dielectric article has a resistivity of greater than 10^{14} ohms-cm. Specifically, Popov et al. does teach using a layer/cloth of polypropylene filaments as the dielectric article (see Example 1), but does not teach the specifics of the cloth. However, it is the goal of Popov et al. to produce a charged filter cloth (background). Angadjivand et al. teaches that polypropylene non-woven, melt blown, microfiber webs were known at the time of the applicant's invention to be suitable materials for use in the production of electrically charged filter materials (Col.2, lines

40 – 67, and Col.3, lines 1 – 43). Therefore, it would have been obvious to one of ordinary skill in the art to utilize a polypropylene non-woven, melt blown, microfiber web (as taught by Angadjivand et al.) as the cloth in the process of Popov et al. with the reasonable expectation of (1) success, as Angadjivand et al. teach that polypropylene non-woven, melt blown, microfiber webs are suitable materials for use in the production of electrically charged filter materials, and (2) choosing a well-known, specific example (i.e., a species) out of the genus of polypropylene filament materials, which is broadly taught by Popov et al. The webs / cloths taught by Angadjivand et al. have a resistivity of greater than 10^{14} ohms-cm (Col.2, lines 48 – 62), as required by Claim 1. The combination of Popov et al. and Angadjivand et al. does not explicitly teach that the vapor is condensed from the atmosphere of a controlled environment of a chamber onto the dielectric article that is disposed in the controlled environment (e.g., in the chamber). Specifically, Popov et al. teaches condensing vapor onto the dielectric article, but does not explicitly teach that the condensing step is performed in a chamber. In other words, Popov et al. is silent with regards to the location of the condensing step. Beach et al. teaches that it was known in the art of producing electrets at the time of the applicant's invention to form an electret by condensing vapor from the atmosphere of a chamber having a given temperature and pressure (i.e., a "controlled environment") onto a substrate that is disposed in the chamber (i.e., in the "controlled environment") (Abstract, Col.2, lines 13 – 27, and Col.3, lines 35 – 67). The vapor is introduced into the chamber by a pressure gradient established throughout the process (i.e., a relatively low chamber

pressure) (Col.3, lines 44 – 54), and the condensation is effected by ambient temperature (Col.3, lines 59 – 61). It would have been obvious to one of ordinary skill in the art to carry out the condensation process of the combination of Popov et al. and Angadjivand et al. in a chamber with the reasonable expectation of successfully and advantageously performing the condensation process in an environment in which process parameters such as temperature, pressure, etc. can be readily and easily monitored and controlled (i.e., as opposed to performing the process outside of a chamber, in which case the control of process parameters would be expected to be more difficult). Further, the combination of Popov et al., Angadjivand et al., and Beach et al. also teaches that the electret exhibits a persistent electric charge. Specifically, Popov et al. teaches that prior art charged filter materials lose their charge in the absence of an electrical field, and that their method overcomes this problem (i.e., that the cloth has a persistent electric charge) (background section of Popov et al.). Further, the examiner notes that the combination of Popov et al., Angadjivand et al., and Beach et al. teaches all the process steps / limitations of the applicant's claims. Therefore, unless essential process steps / limitations are missing from the applicant's claims, the electret of the combination of Popov et al., Angadjivand et al., and Beach et al. would have inherently exhibited a persistent electric charge as claimed by the applicant. Regarding independent **Claim 32**, this claim also requires that (1) the dielectric article comprise a nonconductive polymeric material and (2) the condensate comprise a polar liquid. These limitations are also taught by the combination of

Popov et al., Angadjivand et al., and Beach et al. Specifically, both Popov et al. and Angadjivand et al. teach using polypropylene as the dielectric article (see the discussion of Claim 1 above), which the applicant considers to be a nonconductive polymeric material (see page 5, line 28 through page 6, line 15 of the applicant's specification). Popov et al. also teaches using ethyl alcohol as the vapor/condensate (Example 1), which the applicant considers to be a polar liquid (see page 5, lines 15 – 22 of the applicant's specification). Regarding independent **Claim 33**, the claim mirrors independent Claim 1 (see the discussion above) but requires altering at least one property of the controlled environment of the chamber so as to cause the vapor of the atmosphere to condense. The combination of Popov et al., Angadjivand et al., and Beach et al. teaches this limitation. Specifically, the combination of Popov et al., Angadjivand et al., and Beach et al. reasonably suggests condensing vapors of isopropyl alcohol, ethanol, etc. onto a layer of polypropylene filaments / cloth in a chamber by passing the vapors through the layer (page 2). In other words, the amount of alcohol vapor (i.e., a property) present in the "controlled environment" of the chamber (i.e., the environment in which the cloth is treated) is increased (i.e., altered), thereby causing the vapor to condense on the cloth or web. Regarding new **Claim 52**, the combination of Popov et al., Angadjivand et al., and Beach et al. teaches a method of making an electret in a chamber comprising a controlled environment comprising an atmosphere comprising vapor, the method comprising condensing vapor from the atmosphere onto a dielectric article having a resistivity greater than 10^{14} ohms-cm, and drying the article to remove the condensate, the

electret exhibiting a persistent electric charge (see the discussion of Claim 1 above). Claim 52 also requires that the vapor is conditioned to a temperature T2 and that the article has a temperature T1. This limitation is met by the combination of Popov et al., Angadjivand et al., and Beach et al. Specifically, the vapor of Popov et al. must inherently be provided / introduced at some temperature (i.e., conditioned to a temperature T2), and the dielectric article must also inherently have a temperature (i.e., T1). Please note that Claim 52 does not require any specific temperature for T1 or T2 or any relationship between T1 and T2.

10. The combination of Popov et al., Angadjivand et al., and Beach et al. also teaches all the limitations of Claims 3, 4, 7, 9, 12, 14 – 17, and 22 as set forth above in paragraph 9 and below, including a method wherein / further comprising:

- Claim 3 – The dielectric article comprises a nonconductive polymeric material (Example 1). Specifically, Popov et al. teaches polypropylene, which the applicant considers to be a nonconductive polymeric material (see page 5, line 28 through page 6, line 15 of the applicant's specification).
- Claim 4 – The condensate includes a polar liquid (Example 1). Specifically, Popov et al. teaches ethyl alcohol, which the applicant considers to be a polar liquid (see page 5, lines 15 – 22 of the applicant's specification).
- Claim 7 – The step of condensing comprises placing an article at a temperature T1 in contact with the vapor, the vapor being at a temperature T2, where T1 is sufficiently less than T2 such that the vapor condenses on the article. Specifically, although Popov et al. does not explicitly teach the

relative temperatures of the article and the vapor, it is the desire of Popov et al. to condense a vapor onto a dielectric article in the process of forming an electret (Example 1). Beach et al. teaches that, in the art of forming an electret, a higher temperature vapor will condense on a lower temperature (i.e., ambient temperature) substrate (Col.3, lines 40 – 61). Therefore, it would have been obvious to one of ordinary skill in the art to supply the vapor of Popov et al. at a temperature sufficiently higher than the temperature of the dielectric article so that the vapor effectively condenses on the article, as desired by Popov et al.

- Claim 9 – The controlled environment comprises a vacuum chamber (Col.3, lines 55 – 61 of Beach et al.).
- Claim 12 – The condensate is selected from the group consisting of acetone, methanol, ethanol, liquid carbon dioxide, butanol, or a combination thereof (Example 1 of Popov et al.).
- Claims 14 – 17 - The article is non-woven fibrous web (Claim 14) comprising melt blown microfibers (Claims 15 – 16), particularly comprising polypropylene, poly-(4-methyl-1-pentene), or a combination thereof (Claim 17) (see discussion of Claim 1 above).
- Claim 22 - The electret exhibits a persistent electric charge, the dielectric article comprises a nonconductive polymeric material, and the condensate comprises a polar liquid (see discussion of Claims 1, 3, and 4 above).

11. Claims 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Popov et al. (Russian Document Number 423483) in view of Angadjivand et al. (USPN 5,496,507), in further view of Beach et al. (USPN 4,291,244), and in further view of Coufal et al. (USPN 5,280,406).

12. The combination of Popov et al., Angadjivand et al., and Beach et al. teaches all the limitations of Claims 10, 11, and 13 as set forth above in paragraphs 9 and 10, except for a method wherein the polar liquid is an aqueous liquid (Claim 10), particularly consisting essentially of water (Claim 11), or comprises a fluorocarbon (Claim 13). However, Popov et al. does teach a number of suitable liquids, such as isopropyl alcohol, methanamide, ethyl alcohol, and dimethylformamide, and teach that the liquid utilized should have a dielectric constant of from 15 to 115 (background section). Coufal et al. teaches that it was known in the art of charging a dielectric article to form an electret at the time of the applicant's invention that water could be used as an efficient charging medium, and that water has a dielectric constant of 78.25 (Col.3, lines 7 – 61). The dielectric constant of water, as taught by Coufal et al., is within the range desired by Popov et al. Therefore, it would have been obvious to one of ordinary skill in the art to utilize water as the liquid vapor in the process of the combination of Popov et al., Angadjivand et al., and Beach et al. with the reasonable expectation of (1) success, as Popov et al. teaches a desired range of dielectric constant values, water having a dielectric constant that falls within that range, and Coufal et al. teaches that water is an effective charging medium for charging a dielectric article to form an electret, and (2) obtaining the benefits of

utilizing water as opposed to the liquids taught by Popov et al., such as reduced cost and ease of availability. These benefits would have easily been recognized by one of ordinary skill in the art at the time of the applicant's invention. With regards to Claim 13, Coufal et al. teaches that fluorocarbons such as dichlorodifluoromethane and trichlorotrifluoroethane are the best liquids for charging a dielectric article (Col.3, lines 55 – 61). Therefore, it would have been obvious to one of ordinary skill in the art to utilize one of these fluorocarbons as the liquid vapor in the process of the combination of Popov et al., Angadjivand et al., and Beach et al. with the reasonable expectation of successfully charging the article as desired by Popov et al. and Angadjivand et al. by using a liquid that is one of the best liquids for charging, as taught by Coufal et al.

13. Claims 1, 3, 4, 7, 9 – 11, 14 – 17, 22, 32, 33, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angadjivand et al. (USPN 5,496,507) in view of Pike et al. (USPN 5,759,926).
14. The combination of Angadjivand et al. and Pike et al. teaches all the limitations of Claims 1, 3, 4, 7, 9 – 11, 14 – 17, 22, 32, 33, and 52 for the reasons set forth in paragraphs 16 – 17 of the previous Office Action (which refer to (1) paragraph 18 of the final Office Action, paper #17, mailed on 10/16/2002, and (2) paragraph 11 of the non-final Office Action, paper #14, mailed on 4/3/2002) and below.
15. Specifically, new Claim 52 mirrors independent Claim 1 (which has been discussed at length in the paragraphs of the previous Office Actions cited above in paragraph

14), except that Claim 52 further requires that the vapor is conditioned to a temperature T2 and that the article has a temperature T1. This limitation is met by the combination of Angadjivand et al. and Pike et al. Specifically, the vapor (i.e., the steam) of the combination of Angadjivand et al. and Pike et al. must inherently be provided / introduced at some temperature (i.e., "conditioned to a temperature T2"), and the dielectric article / web of Angadjivand et al. must also inherently have a temperature (i.e., T1). Please note that Claim 52 does not require any specific temperature for T1 or T2 or any relationship between T1 and T2. Additionally, amended independent Claims 1 (from which Claims 3, 4, 7, 9 – 11, 14 – 17, and 22 depend), 32, and 33, and new Claim 52 require that the condensing take place on a dielectric article in the controlled environment of a chamber. This limitation is reasonably suggested by the combination of Angadjivand et al. and Pike et al. Specifically, the combination of Angadjivand et al. and Pike et al. reasonably suggests a process of forming an electret wherein steam (i.e., water vapor) is directed from a spraying means to condense onto a moving dielectric fibrous web supported on, for example, a belt, and then the web is dried (Col.4, lines 10 – 27 of Angadjivand et al.). Angadjivand et al. also teaches that a vacuum is provided beneath the porous support supporting the fibrous web (i.e., the dielectric article) during the charging process (i.e., equivalent to the steam wetting / condensation process suggested by the combination of Angadjivand et al. and Pike et al.) (Col.4, lines 10 – 19). As such, the environment in which the web of Angadjivand et al. is disposed is a "controlled environment" because the pressure of the surroundings

can clearly be regulated and/or altered in a predetermined manner (i.e., by the use of a vacuum). It is the examiner's position that it would have been obvious to one of ordinary skill in the art to perform this entire process inside of a room / chamber with the reasonable expectation of successfully and advantageously performing the electret-forming / hydrocharging process in an environment in which process parameters such as temperature, pressure, etc. can be readily and easily monitored and controlled (i.e., as opposed to performing the process outside of a room / chamber, in which case the control of process parameters would be expected to be more difficult and contamination of the process could occur).

Response to Arguments

16. Applicant's arguments filed on 6/20/2003 have been fully considered but they are not persuasive.

17. Specifically, the majority of the applicant's arguments have been rendered moot by the new grounds of rejection set forth above.

18. Regarding the combination of Angadjivand et al. and Pike et al., the applicant does argue that there is no reason, suggestion, or motivation to make the aforementioned combination. In response, the examiner disagrees. Briefly, Angadjivand et al. teaches the production of an electret by wetting a non-woven fiber web with a stream of water droplets and then drying the web (Abstract). Pike et al. teaches that wetting a non-woven fiber web can be performed by contacting the fibers with either a hot water spray, which is the process taught in Angadjivand et al., or with steam

(i.e., water vapor) (Col.8, lines 40 – 46). As such, one of ordinary skill in the art would have been motivated to wet the non-woven fiber web of Angadjivand et al. with steam as taught by Pike et al. with the reasonable expectation of obtaining similar results, i.e., of successfully wetting the non-woven fiber web, regardless of whether the wetting is done with a spray of misted water droplets (as taught by Angadjivand et al.) or with a steam spray (as taught by Pike et al.). Please note that no unexpected results have been shown for wetting the web by condensation of a vapor as opposed to spraying the web with a fine mist of water droplets as taught by Angadjivand et al.

19. The applicant also argues that Angadjivand et al. teaches that the hydrocharging is performed at a pressure sufficient to provide the web with the electret charge, generally in the range of about 10 to 500 psi, and there is nothing in Pike et al. to suggest that steam will provide this pressure. In response, the examiner agrees that water droplet stream pressures in the range of 10 to 500 psi are utilized in the process of Angadjivand et al. to hydrocharge the web and form an electret. However, one of ordinary skill in the art would readily recognize that steam (i.e., water vapor as opposed to water droplets), as taught by Pike et al., could also be supplied at a desired high pressure as, for example, so-called "high-pressure steam". One of ordinary skill in the art would have the reasonable expectation that, if a spray of water droplets at a pressure of about 10 to 500 psi is sufficient to hydrocharge the web of Angadjivand et al., a spray of "high-pressure steam" would have a similar hydrocharging effect.

Allowable Subject Matter

20. Claims 25 – 31 and 34 – 50 are allowed. Specifically, independent Claim 25 (from which Claims 36 – 38 and 42 – 50 depend) requires making an electret by placing a dielectric article in a liquid of a controlled environment, condensing vapor from the atmosphere of the controlled environment onto the dielectric article to form a condensate thereon, decreasing the pressure on the atmosphere to evaporate at least a portion of the liquid, and then drying the article. This specific condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in combination. Therefore, Claim 25 is allowed. As Claims 36 – 38 and 42 – 50 depend from Claim 25, these claims are also allowed. Independent Claims 26 and 27 require particular methods of condensing vapor from the atmosphere of a controlled environment, specifically increasing the pressure on the atmosphere (Claim 26) or performing an adiabatic expansion (Claim 27), that are not taught or reasonably suggested by the prior art or record in a process of making an electret as claimed by the applicant. Therefore, Claims 26 and 27 are allowed. Independent Claim 28 (from which Claims 29 – 31 depend) requires altering a first property of a controlled environment to evaporate a portion of liquid into the atmosphere of the controlled environment, and altering a second property of the controlled environment in order to condense the vapor onto the surface of a dielectric article. This specific evaporation / condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in

combination. Therefore, Claims 28 – 31 are allowed. Independent Claim 34 requires altering the volume of a controlled environment to evaporate a portion of liquid into the atmosphere of the controlled environment, and altering the volume of the controlled environment in order to condense the vapor onto the surface of a dielectric article. This specific evaporation / condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in combination. Therefore, Claim 34 is allowed. Independent Claim 35 (from which Claims 39 – 41 depend) requires altering at least one property selected from the group consisting of volume, pressure, or temperature of a controlled environment in order to condense vapor onto a dielectric article in the process of forming an electret. This specific condensation process used to form an electret is not taught or reasonably suggested by the prior art of record, alone or in combination. Therefore, Claims 35 and 39 – 41 are allowed.

21. Claims 5, 6, 8, 18 – 21, and 51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. The examiner's reasons for indicating allowable subject matter are set forth in paragraphs 23 – 24 of the non-final Office Action, paper #4, mailed on 4/11/2001.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley D Markham whose telephone number is (703) 308-7557. The examiner can normally be reached on Monday - Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Wesley D Markham
Examiner
Art Unit 1762

SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

WDM